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Message from the Director

At the end of my first year as Director, I reflected on the recent successes and upcoming challenges for the Fish and Wildlife Service and our trust resources. Having spent a year traveling through each of regions and listening to hundreds, maybe thousands of employees, I gained a keen awareness of where we all see the Fish and Wildlife Service heading.

In my report to employees at the end of last year, I translated your suggestions and concerns into these four Service Priorities for the next two years:

- Strengthening the ecosystem approach to fish and wildlife conservation,
- Lifting the conservation of migratory birds to a higher level,
- Leading efforts to prevent the introduction and spread of invasive species, and
- Setting the course for the future of the Refuge System.

Committing to those priorities was the easy part. The difficult part was deciding what to do about them and how to demonstrate marked success at the end of the two year time-line. For that I called on our Assistant Directors, who in turn assembled cross-region, cross-program teams of employees, to make specific recommendations and commitments for success. Those items are contained in this Action Plan.

Having sent it through an exhaustive review, I now expect to hold this Action Plan up as a benchmark for our success. Like any blueprint, these specific goals will require flexibility and adaptation. However, it's rewarding to know that some of these goals have already been accomplished in many parts of the country.

I appreciate the hard work that went into producing this Action Plan, the thoughtfulness of those who commented on it, and the commitment of all of us who will make it a reality.

In my upcoming travels into the field and meetings here in the Washington Office, I look forward to charting our progress on each of these items. If each of these actions are treated like another species on a birders life-list, I hope to cross many of them off of mine in the next 18 months.



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National Wildlife Refuge System

Vision

"The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

*National Wildlife Refuge System
Improvement Act of 1997*

Introduction

The American character has been molded by its connections with the land and its spirit fortified by a close connection with the wild creatures of prairie, forest, coast, marsh, and river. The American spirit of independence and self-sufficiency became legendary. Settlement of the continent often spurred an untempered exploitation of wildlife and its habitat. The clouds of passenger pigeons vanished and the thunder of bison was silenced.

These changes in the natural world did not go unnoticed. Early conservation movements were rooted in the reaction of people who saw the devastation of market hunting and were appalled by the slaughter of birds for fashion. These people caught the ear of presidents and others who crafted the principles of modern wildlife conservation.

It was in these times the National Wildlife Refuge System was born. It was born on an island in Florida's Indian River with a promise from President Theodore Roosevelt; and carried out by a boat builder, cook, and orange grower, Paul Kroegel. Quietly, the first refuge proclaimed a determined, emerging consciousness about the value of things natural, wild, and free. Pelican Island was a promise to preserve wildlife and habitat for its own sake and the benefit of the American people.

Today, the System has grown to more than 93 million acres in size. It includes more than 500 refuges and over 3,000 waterfowl production areas spread across all 50 states and



Red Tailed Hawk, Bosque del Apache NWR. Photo by Karen Hollingsworth.

several territories protecting a vast array of the nation's ecosystems. Refuges are gifts to the Nation's people and to generations yet unborn. Most of all, each refuge and waterfowl production area is land. They provide a sense of place, of timeless connections to the natural world. They are places to rediscover the "sense of wonder" Rachel Carson so eloquently described.

However, for many years the System functioned without an organic act. Refuges were established by a patchwork of Executive Orders and other laws. Uses and activities allowed on refuges varied greatly and did not always complement the wildlife purposes.

Charting a course for the future

This all changed in 1997 with the signing of the National Wildlife Refuge System Improvement Act. The Act provided a mission for the System, and clear standards for its management, use, planning, and growth. Forcefully, faithfully, and consistently implementing this law will provide a solid foundation as the System approaches its second century of service to wildlife, habitat, and people.

In October 1998, a historic first-ever national gathering of refuge managers took place in Keystone, Colorado. One result of this conference was *Fulfilling the Promise*, a document that articulates a clear vision of the future of the System and recommendations on how this vision can be achieved. The objectives included here are a subset of the recommendations in *Fulfilling the Promise*, and achieving them will be a key part of the Service's concerted effort to protect America's wildlife and habitat legacy for future generations.

Action Plan

Goal 1: Conserve wilderness values within the Refuge System.

Wilderness, due to its very nature, is extremely important to the conservation of biodiversity within the System. Wilderness is a reservoir of biological diversity and natural ecological and evolutionary processes. Wilderness is also a way of perceiving and valuing; it is as much about a relationship with the land as a condition of it. Wilderness is a symbolic landscape, encompassing values and benefits that extend beyond its boundaries.

Currently, there are 20 million acres of wilderness in the Refuge System. The Service needs to evaluate these areas, internally and externally, and become a full partner in the interagency wilderness management community.

Action: Director will issue a memo that states that the Wilderness Act establishes wilderness as a purpose

of the encompassing administrative unit, that proposed wilderness areas should be managed as if they were designated wilderness (except for Alaska), and that training is an integral component of sound management. The memo will clarify the criteria for wilderness designation and ask for formal designation of Regional Wilderness Coordinators. (ARW/RF. Target: July 1999).

Opportunity: Members of Directorate participate in 50th Anniversary celebration of publication of *A Sand County Almanac* being sponsored by a coalition of organizations. A special event would be an ideal opportunity to promote the 35th anniversary of the Wilderness Act. An event could be tied to establishment of an Aldo Leopold National Wildlife Refuge (Public involvement and planning currently underway in Wisconsin).

Opportunity: Member of Directorate initiates and participates in a 25-year anniversary celebration



Kodiak Bear, Dog Salmon Creek, AK. Photo by Dave Menke.

of wilderness establishment on Okefenokee National Wildlife Refuge (this could be celebrated as an early National Wildlife Refuge Week event since it takes place October 1). Partners should be encouraged to participate.

Action: ARW/RF will take lead on completing revision of Wilderness Management Chapters for the Service Manual. (Team members receive draft management chapters in July 1999. Draft chapter completed September 1999).

Action: ARW/RF and Regions will work with BLM, NPS, and USFS to develop consistent policies to help unify the National Wilderness Preservation System. (Continuing; initial meeting of Agency Directors — September 1999).

Opportunity: Director recommends the Secretary invite agencies to a wilderness management forum to develop consistent management policies in support of Secretary's Protect Our Parks and Refuges Initiative.

Opportunity: Director submits a wilderness proposal to the Secretary for recommendation to the Congress in support of the President's Lands Legacy and the Secretary's Protect Our Parks and Refuges Initiative. Memorandum will be transmitted to Regional Directors directing certification that Wilderness Study Areas are being managed appropriately and the lands continue to support wilderness designation.

Action: Regions will identify areas that qualify as Wilderness Study Areas on all refuges that have not conducted a formal wilderness review and on refuges that have added significant acreage since their last formal wilderness review. (Regional Directors. Target: September 1999).

Action: Regional Wilderness Coordinators will work with Arthur Carhart staff to develop and maintain a strategic plan for wilderness training that identifies training needs for personnel, location and position of personnel, and a plan for implementing the training. The Washington Office Wilderness Coordinator will complete an annual report on wilderness training accomplishments. (Regional Directors. Target: June 1999; ARW/RF. Target: September 1999).

Opportunity: Member of Directorate addresses participants at the September 1999, National Wilderness Stewardship course regarding Service leadership and new initiatives for protecting wilderness.

Action: Regional and Washington Office Wilderness Coordinators will review all Wilderness Management Plans for consistency with Service wilderness policy. (ARW will draft policy memorandum by September 1999. Target for initial reviews: December 1999).

Action: RONS and MMS will be updated so that activities that will benefit wilderness and other special management areas are identified. National Wilderness Coordinator will work with RMIS coordinator to notify regional RMIS coordinators of change. (ARW. Target: May 1999).

Goal 2: Ensure good scientific information and expertise for sound management decisions.

In order to make sound management decisions, refuge managers must have reliable information about causal relationships between habitat quality and quantity, and fish and wildlife population dynamics. An interdisciplinary biological workforce will help meet these information needs. This workforce will need opportunities for continuing

education and interaction with the larger professional community in order to keep abreast of the latest scientific developments.

Action: Establish draft policy on maintaining biological integrity of the Refuge System as called for in the Refuge Improvement Act. (ARW/RF. Target: July 1999).

Action: Direct an analysis of current refuge staffing relative to each station's administrative complexity, and determine minimum levels of staffing on all refuges. Ensure each refuge has RONS project supporting staffing analysis. (ARW/RF. Target: May 1999).

Action: Establish or designate at least one Regional Refuge Biologist position assigned to the ARW/PARD. Assure that these individuals meet at least annually to ensure biological programs are consistent with Biological Needs Assessment. (Regional Directors. Target: October 1999).

Action: Designate cross-program teams of biologists in each Region to provide biological technical support to field stations. (ARW/RF will prepare memorandum for Director to send to Regions. Target: June 1999).

Action: Develop a process for biological field station evaluations and conduct at least one pilot in each Region. (ARW/RF will develop biological review guidelines. Target: August 1999; Regional Refuge Biologists conduct pilot reviews. Target: November 1999).

Action: Encourage biological staff to participate in professional societies and technical meetings as part of annual 40 hours of training and continuing education. (ARW/RF will draft memorandum. Target: June 1999).

Action: Develop with NCTC a Refuge Academy module related to the administration of a System-wide biological program. Module would include standardized implementation of policies related to inventory/monitoring, planning, development of biological objectives, and strategies for adaptive habitat management. (ARW, NCTC. Target: Implement module in FY 2000).

Opportunity: Director or Assistant Director announces development of standing committee on Refuge System training issues, to be comprised cooperatively of individuals from the Division of Refuges and NCTC, and related ARW programs, which would develop training needs, policy, and programs for refuge staff.

Action: Develop an annual or bi-annual forum on refuge biology in conjunction with the annual meeting of The Wildlife Society. The technical meeting would feature papers and other presentations on refuge biology by and for station biological staff from across all Regions. All biological staff would be encouraged to attend. (ARW will coordinate first forum. Target: FY 2000).

Opportunity: Director opens technical meeting with keynote address emphasizing science-based biology as the core of refuge management and the conservation mission of the Refuge System.

Goal 3: Provide a strong Refuge Law Enforcement Program to assure public safety and resource protection.

Protecting refuge resources, and assuring the safety of visitors are among the most fundamental responsibilities of refuge managers. Law enforcement responsibilities are carried out by full time and collateral duty refuge officers whose line of work daily puts them in

harms way. For example, recent crime statistics for one year revealed that refuges were the scene of seven homicides, 26 assaults, two rapes, 200 burglaries, over 4,000 acts of vandalism, and 10,000 natural resource violations. In addition, refuge lands are the scenes of a large number of drug-related crimes. In 1998 there was a total of 346 drug related crimes on refuge lands and 25 tons of marijuana and nearly two tons of cocaine worth \$200 million seized on Service lands. More disturbing, an estimated one out of every 10 drug violations occurred in association with a hunting or fishing activity. It is clear that public safety and resource protection require the Service's most professional and dedicated efforts to assure safe and enjoyable experiences for refuge visitors.

The Service must work harder to increase staff and funding while also working more effectively with the resources at hand. This will mean maintaining and continuously improving training efforts, improving policies to reduce officer liability and enhance visitor and officer safety. It will mean training and equipping refuge officers with the specialized equipment and skills they will need to meet the challenges of the 21st century. It will also mean improving opportunities for career enhancement through development of a career ladder within the Service and by assuring consistency in recruiting and in the application of standards that are used to select and supervise refuge law enforcement officers.

Action: Hire a national law enforcement coordinator to be stationed in the Division of Refuges in Arlington, Virginia, per staffing plan. (ARW/RF. Target: June 1999).

Opportunity: Director or Assistant Director stresses the importance of the role of refuge law enforcement

officers in address to the Refuge Officer Basic School, Federal Law Enforcement Training Center Basic Training, or through other opportunities.

Opportunity: Members of Directorate communicate interest and support for refuge officer program through established media such as *Fish and Wildlife News*, *People Land and Water*, and press releases noting significant refuge law enforcement successes.

Action: Establish standards/criteria to aid in determining which positions should be designated for full or collateral duty law enforcement as well as standards for the recommended law enforcement staffing patterns at field stations. (ARW/RF, draft standards ready for program review. Target: July 1999).

Action: Establish a standard position description for full-time refuge officers to be used throughout the Refuge System. The standard position description should incorporate the requirements necessary to qualify for 6(c) special retirement and have a grade structure that provides for a career ladder. (ARW/RF, draft position description ready for program review. Target: July 1999).

Goal 4: Provide consistent policies on Refuge uses for implementation of the Refuge Improvement Act.

The Refuge Improvement Act clearly defined the mission of the National Wildlife Refuge System and provided guidance on the priorities to be considered in management of the System. The law now clearly states that the needs of fish, wildlife, and plants come first.

Congress also established priorities for which types of public use should be facilitated when compatible with



Red Tailed Hawk, Desoto NWR. Photo by Dave Menke.

the mission of the System and the purpose of the refuge. These priority public uses are as follows: hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation.

To implement the Refuge Improvement Act, comprehensively written, consistently applied policies must be developed. These policies must result in clear guidance on the application of the compatibility standard, address how the six priority public uses will be administered, and provide guidance on assessing the appropriateness of other uses of the System.

Action: Finalize Service Manual chapter and regulations establishing the process for determining compatible uses. (ARW/RF, Target: Late 1999).

Action: Finalize Service Manual chapter on Comprehensive Conservation Planning. (ARW/RF, Target: Late 1999).

Action: Finalize Service Manual chapter providing guidance on determining the appropriateness of refuge uses that are not priority uses under the Refuge Improvement Act. (ARW/RF, draft policy ready for program review. Target: June 1999).

Action: Finalize Service manual chapters on administration and management of priority public uses. (ARW/RF, draft policy ready for program review. Target: August 1999).

Opportunity: Director, Assistant Secretary, and Secretary announce major policies developed under the Refuge Improvement Act through press conferences and Congressional and constituent briefings. These announcements are opportunities to raise awareness of refuge management and strengthen relationships with key partners.

Action: Public Use Minimum Requirements for refuges will be updated to include the intent of the Refuge Improvement Act and provide consistent national standards for offering the highest quality visitor programs and facilities. Formal review process will be established in all Regions. Station evaluations of fulfilling these requirements will be used to develop RONS and MMS packages. (ARW/RF, draft standards ready for program review. Target: August 1999).

Goal 5: Enhance community partnerships to assure conservation of Refuge resources.

Today, the System benefits from the work of more than 30,000 volunteers who annually contribute more than one million hours per year supporting almost every facet of refuge management.

The System also benefits from partnerships with citizen groups who organize to support individual refuges in protecting resources. Experience has shown that Service employees who take the time to serve as envoys in their communities can accomplish great things for their refuge and the System.

To that end, the Service needs to enhance its capacity to meet the challenge of developing community partnerships for the System. In particular, the Refuge Support Group Initiative will continue, community partnership training and networking opportunities will be expanded, and the National Wildlife Refuge System Volunteer and Community Partnership Enhancement Act will be implemented. Refuge managers also need more flexibility to work with concessionaires providing services to the public on refuges.

All programs must work together to achieve ecosystem goals. Refuges can serve as important anchors of habitat, maintaining biological diversity, and leading to conservation of additional lands and waters.

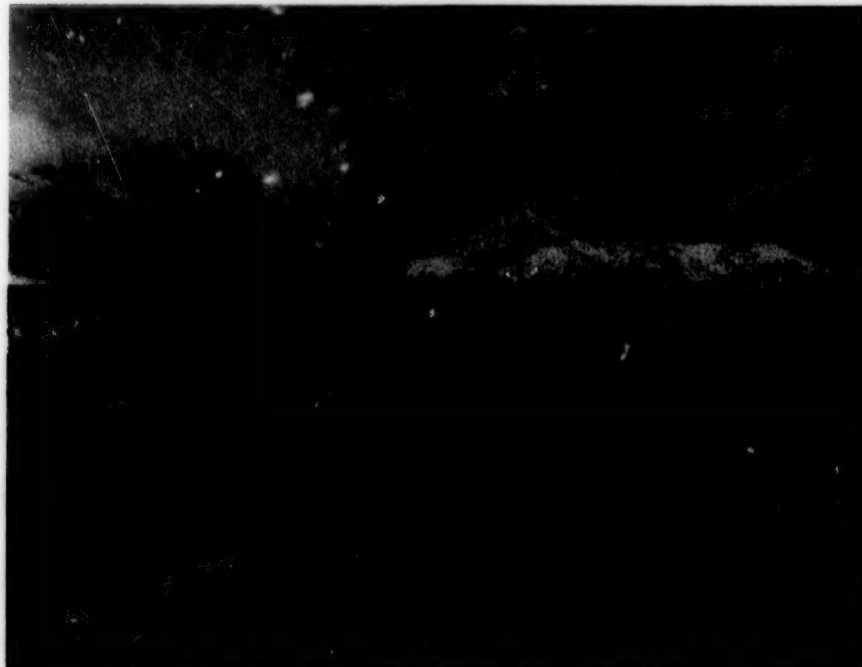
Action: Encourage cross program expertise in all Comprehensive Conservation Planning teams. (ARW/RF will incorporate into draft planning policy. Target: May 1999).

Opportunity: Members of Directorate will attend ecosystem team meetings and stress how Refuges can help other Service programs meet objectives.

Action: Cross program teams will review draft refuge management policies. (ARW/RF, now and continuing).

Opportunity: Director or Assistant Director address program issues at one or more community partnership training workshops.

Action: Complete an implementation plan for the Volunteer and Community Partnership Enhancement Act, including a charter for an implementation team. (ARW. Target: August 1999).



*Tundra Swans and white fronted geese, Lower Klamath NWR.
Photo by Tupper Ansel Blake.*

Opportunity: Director and Assistant Director approve and sign charter and implementation plan and fund team's efforts.

Action: Develop budget initiative for FY 2000 to begin implementation of Volunteer and Community Partnership Enhancement Act. (ARW/RF. Target: December 1998).

Action: Draft legislative amendment for exemption from 40 USC 303(b) that will allow concessionaires to make repairs and improvements to concession facilities. (AEA, ARW. Target: June 1999).

Action: Continue to provide support to the Cooperative Alliance for Refuge Enhancement. (Ongoing support, ARW/RF).

Opportunity: Members of the Directorate will highlight cross program, ecosystem, and partnership successes in speaking engagements.

Goal 6: Enlarge the number of U.S. Citizens who know and appreciate the values of the National Wildlife Refuge System.

Five years ago, the Service began a concerted effort to build public recognition and support for the System by implementing a nationwide communications strategy called the 100 on 100 Outreach Campaign. The key strategy behind this campaign is a focus on communications with five priority audiences considered to have the greatest opportunity to support the System.

The campaign and investments in outreach personnel at all levels have helped bring about many successes for the System, including passage of the Refuge Improvement Act, the solidification of 18 sportsmen's and environmental groups into the Cooperative Alliance for Refuge Enhancement, and the largest funding increase in the System's history to address maintenance and operations needs.

Action: Develop charter, expertise qualifications, and guidelines on the role of the Refuge System Outreach Team. (ARW/RF. Target: June 1999).

Action: Refine Refuge System Outreach Campaign document to ensure strategic activities by formalizing key messages, evaluating needs for baseline information on public knowledge of the System, clarifying expectations for working with core audiences, and improving guidance on delivery of messages to those audiences. The refined campaign will also incorporate new efforts such as the National Outreach Strategy, Refuge Improvement Act, and Volunteer and Community Partnership Enhancement Act. In addition, it will outline a Centennial Publicity Campaign that will raise visibility for all Service programs as a major focus of outreach efforts for the next few years. (ARW, External Affairs. Target: June 1999).

Opportunity: The Director and Assistant Director continue to support the Refuge System Outreach Campaign to advance internal buy-in and ensure strategic outreach efforts are carried out. This support will become increasingly important leading up to the Centennial, which presents an exceptional opportunity to raise visibility of the Service.

Opportunity: The Director and Assistant Director are involved in special events, major announcements on Refuge System issues, and in combating threats to refuges with national implications, which offer opportunities to raise public awareness of the Refuge System's important role in wildlife conservation.

Action: Reevaluate established dates of National Wildlife Refuge Week and recommend alternatives. (Refuge outreach team. Completed in time for Refuge Week 2000).

Action: Recruit celebrities to help promote activities outlined in the Centennial Publicity Campaign (Refuge outreach team, External Affairs, Directorate. Continuing process).

Opportunity: The Director and Assistant Director help recruit celebrity spokespersons for the Centennial products and activities.

Action: Identify high profile special events for the Centennial celebration, such as establishment of a Theodore Roosevelt National Wildlife Refuge and a historical celebration at Pelican Island in 2003. (Refuge outreach team, External Affairs. Target: November 1999).

Opportunity: The Director's and Assistant Director's involvement in planning Centennial activities maximize potential for visibility.

Goal 7: Provide a national approach for selecting and prioritizing lands for acquisition, incorporating the goals of trust resource conservation, biological integrity, diversity, environmental health, and ecosystem conservation.

The Service recognizes that one of the most important challenges in the land acquisition process is the development of integrated National and Regional habitat goals and objectives. Additional data on North American floral and faunal distribution, species conservation status, and land cover information will help focus acquisition priorities.

National guidance will ensure that the Service is pointed in the right direction and achieving the maximum possible benefit from land acquisitions and protection. This guidance will provide consistent direction in defining the areas of greatest conservation concern.

Opportunity: The Director will appoint a task force to develop a nationwide process and policy for selecting lands for acquisition priority. The process will involve all Service programs and will establish guidance appropriate for ecosystem teams to use in developing acquisition goals and priority sites in each Region.

Goal 8: Improve employees' ability to easily locate guidance on Refuge management and operations.

Conversion of guidance and policy contained in various Fish and Wildlife Service management and administrative manuals and handbooks into the Service Manual was mandated by the Director in the late 1980s. In its current state, accessing appropriate refuge policies in the Service Manual is complicated by the dispersal of these policies through a much larger document covering all Service activities. Finding all the pertinent policies which need to be reviewed when making a management decision is complicated and the likelihood that a pertinent policy will be overlooked increases.

The preparation of a "refuge manual" which gathers together all policies pertinent to refuge management activities would greatly enhance the effective implementation of those policies. The manual should be made available on-line to ensure that the most current policies are available in a timely manner.

Action: Restore the Refuge Manual and establish a site on the Internet and/or Intranet where all pertinent policies can be accessed. (ARW/RF. Target: December 1999).

Goal 2: Reduce the negative impacts caused by problem and invasive species on Refuge lands and ecosystems.

Habitat alteration has resulted in major changes in wildlife population numbers and the way they are distributed. Exotic species introductions and expansion of species to areas where they are not endemic have caused native species to be displaced or reduced. Feral animals have direct impacts on wildlife populations. Policies need to be developed providing sound justification for reducing impacts of predators and competitors on fish, wildlife, and plants. Clear messages on restoring ecological balance must be provided to stakeholders.

Action: Revise Service manual chapter on trapping. (ARW/RF, draft chapter available for review. Target: March 1999).

Action: Adjust staffing to designate National Invasive Species Coordinator in the Division of Refuges. (ARW/RF. Target: May 1999).

Action: Regional Directors (R2, R3, R4, R6) are directed to establish a joint coordinator position to support implementation of the mid-continent snow goose management plan. The coordinator will be stationed in the mid-continent flyway area to coordinate management plan with partners. Coordinator would serve as Service liaison and work cooperatively to ensure that Refuges are responsive to recent Conservation Order for white goose management. (ARW/RF will draft memorandum for Director's signature. Target: June 1999).

Action: Establish cross-program team to develop a plan for prioritizing invasive species threats on System units. This could be accomplished by each Region appointing or hiring an invasive species specialist with funds from Invasive Species budget initiative. (Regional Directors. Target: October 2000).

Action: Establish position to develop mosquito management policy and management handbook. Work cooperatively with states, American Mosquito Control Association and Districts, local municipalities, counties, and specialists in mosquito management to develop biologically sound guidelines for use by refuges. (ARW/RF. Target: May 1999).

Opportunity: Members of the Directorate highlight problem and invasive species issues in speaking engagements.

Opportunity: Director ensures invasive species issues on refuges are represented in Departmental initiatives and events.

Migratory Bird Conservation

Rising to a New Level

Vision

Leadership in migratory bird conservation is globally acknowledged because of the U.S. Fish and Wildlife Service's demonstrated successes in promoting and maintaining healthy migratory bird populations.

Introduction

Migratory birds have been recognized as an indispensable resource ever since the first humans arrived in North America. They have important recreational, aesthetic, and cultural values, and their economic impact in the United States alone has been estimated at almost \$20 billion annually. The U.S. Fish and Wildlife Service has the legislative mandate, as well as the moral responsibility, to provide leadership in the conservation of migratory birds.

The past few decades have been witness to alarming and unnatural population declines of many bird species. Conversely, some species are exhibiting artificial population explosions that quickly exceed the carrying capacity of important ecosystems. From the tallest mountaintops, to tallgrass prairies, to coastal marshes, America's migratory birds are part of every ecosystem and they are in trouble. They indicate the health of our world: if we are able to conserve healthy bird populations then it is likely our own landscapes will be healthy.

Fortunately, concern for bird populations by State and Federal natural resource agencies, conservation organizations, businesses, industry, public and private institutions, and citizens has begun to coalesce during the past 10 years. Substantial scientific investigation and conservation

planning have been completed, and the ground work for strong partnerships has been forged. This document and its call for action are intended to help the U.S. Fish and Wildlife Service build upon its successes, but also to recognize that the institution of migratory bird conservation must grow and evolve. The conservation problems faced today are larger in scope, more complex, and more demanding of fiscal and personnel resources than at any time in the past. To be effective in addressing these problems, the Service must seek approaches to conservation that are more pro-active, cost-effective, and adaptable.

A more strategic approach to migratory bird conservation must begin with an acknowledgment that local problems are often a result of events occurring at large, often multiple, scales; that human socioeconomic systems are as much a part of the ecology as soil, water, and birds; and that management goals should include ecological understanding, as well as social and economic product. In fact, the U.S. Fish and Wildlife Service implicitly recognized these themes in its "ecosystem approach" to resource management. Embodied in the ecosystem approach is the idea that it is the myriad connections — among ecological events at different places and times; among birds, people, and their environment; and between research and management — that hold the key to meeting the conservation challenges now facing the Nation.

Recent events make this a pivotal time in migratory bird conservation. The North American Waterfowl Management Plan has been in place for just over 10 years and already has become the model of modern wildlife conservation. Other migratory bird interests are following suit, and large-scale,

strategic planning efforts are underway in earnest for landbirds, shorebirds, and colonial waterbirds. The Commission for Environmental Cooperation, created by the North American Free Trade Agreement, is providing a forum for improving coordination and cooperation among various bird conservation initiatives. The motivation for cooperation is straightforward — the need to integrate planning, implementation, and evaluation efforts to ensure maximum program efficiency. Done correctly, this integration has the potential to elicit public support that is both broad and deep.

A common interest that has emerged from the dialogue is "regionally-based, biologically-driven, landscape-oriented partnerships delivering the full spectrum of bird conservation across the entirety of the North American continent." The phrase "regionally-based" is an acknowledgment that conservation actions should have a geographically and ecologically explicit focus. "Biologically-driven" is a recognition that effective conservation depends on the ability to predict reliably the responses of birds to management interventions. "Landscape-oriented" involves an acknowledgment that migratory bird habitats often are part of working landscapes that sustain human communities. In "partnerships" there is a recognition that the Service needs to reach out to those interested in sustainable ecosystems in order to forge new alliances for the conservation of migratory birds. The "full spectrum of bird conservation" means that the Service will not confine its actions to benefit only a portion of the birds, e.g., hunted species; but will find ways its activities will benefit all birds for which the agency is federally responsible. This document is intended to identify specific actions that will support and complement these strategic themes.

Each action identifies a new initiative, or significant re-emphasis of an existing one, that will contribute substantially to the conservation of migratory birds within existing budgets. The actions highlighted here are not all-inclusive and it is understood that many other existing and new initiatives will also contribute to achieving the vision. Associated with some of the actions are "opportunities" which detail ways in which the Directorate can support those actions. All actions include references to individuals and offices that will have the lead for the action. For clarity, these references do not always include all of the other individuals and offices that will be involved in completing the action.

Background

The Service has an array of tools that are used to conserve migratory birds. All parts of the Service can contribute to this Action Plan. The Migratory Bird Management Program (coordinated by the Office of Migratory Bird Management in conjunction with regional and field offices) and the North American Waterfowl Management Plan (coordinated by the North American Waterfowl and Wetlands Office in conjunction with many partners) are the traditional stalwarts of migratory bird conservation for the Service. They have reached out and embraced new initiatives that include all species, all habitats, and many other nations. The result is that Partners in Flight, National Shorebird Conservation Plan, and other consortiums are prepared to assist the Service in implementing science-based landbird, shorebird, and colonial waterbird conservation and monitoring plans.

A 15-year initiative to incorporate the best science, the desires of local communities, and a long-term vision for conservation of fish, wildlife, and

plants is underway in the National Wildlife Refuge System. Comprehensive Conservation Plans will be made for each of the 516 National Wildlife Refuges. The NWRS is re-establishing itself as the land-based anchor of migratory bird conservation in the United States. However, this system alone, or even all public lands taken together, cannot adequately preserve the rich diversity of migratory birds or their habitats. The Service's private lands programs, including Partners for Fish and Wildlife and the private lands component of Coastal Programs, serve as an effective complement to habitat conservation on Federal and State properties. Private lands projects not only restore and enhance key habitats for migratory birds, but most importantly gain the understanding and commitment from private landowners about the need to conserve our natural resources. Habitat conservation will continue to be one of the most effective ways to build the ecosystem approach for bird conservation within and beyond Federal land borders.

In addition to habitat loss, modern lifestyles themselves create hazards for migratory birds. The Environmental Contaminants and Law Enforcement programs seek solutions to these environmental obstacles, through sound science and public education, before they impinge upon the integrity of migratory bird populations. When proactive endeavors fail to curb destructive activities, other regulatory and enforcement actions are necessary to help secure those imperiled populations.

Unfortunately, even the full thrust of Service activities and those of its partners have not precluded problems that severely impact some species. For those threatened and endangered species, as well as

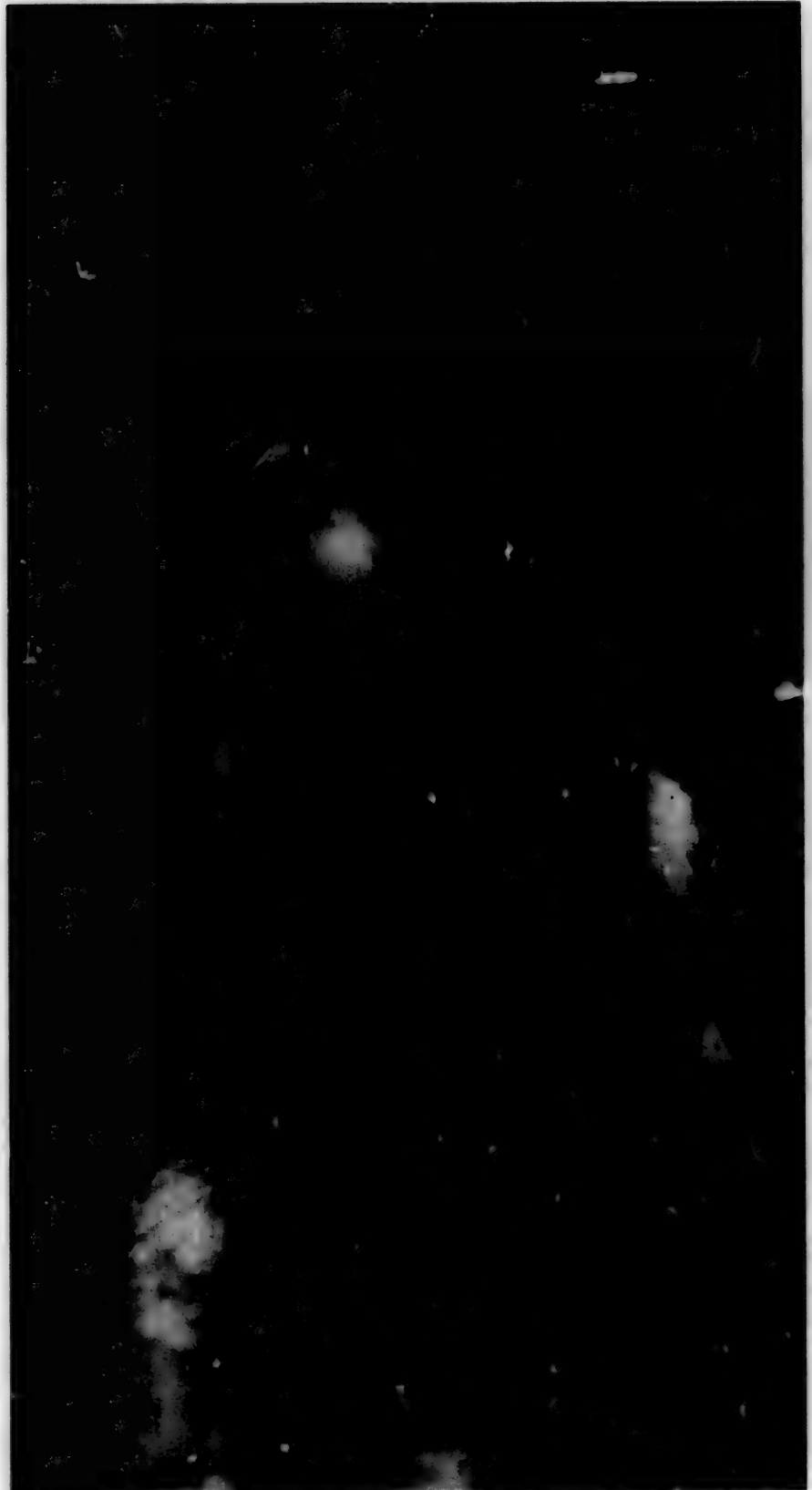
species whose population trajectories possibly indicate a need for future listing, the Endangered Species Program provides a last attempt to pull species back from the brink of extinction. This safety net, and the public outreach that goes along with it, provides Americans with a "wake-up call" that they are about to lose a unique organism that can never be recovered.

Migratory birds are somewhat unusual in the animal world in that they range across thousands of miles during their annual cycle. Hence, as conservation biologists agree, actions directed only at a portion of the annual geographic range are unlikely to safeguard susceptible migratory birds from population problems. International Affairs provides that critical international link to tropical and Pacific Rim partners. The Service is able to assist these nations with projects that can secure the long-term persistence of migratory birds.

All of these elements of the Service require strong communication to the people of the Americas and beyond. In this regard, the Office of Public Affairs is developing a communications strategy to complement the actions outlined below. Through these actions and gaining better understanding and support by the American people, the Service is poised to rise to a new level of migratory bird conservation for the 21st century.

Several core messages are evident and should be communicated to partners and the American public:

1. Migratory birds are an excellent indicator of the overall health of an ecosystem. When bird species are declining, everyone should be concerned.



Swainson's Hawk, Bosque del Apache NWR. Photo by Karen Hollingsworth.

2. For the vast majority of people, birds represent the sole everyday contact they have with wildlife. They connect all of us, from city dwellers to rural farmers, to the environment.

3. Migratory birds face serious challenges. Many species are in decline because of habitat loss, collisions with man-made objects, and contaminants. Basic knowledge about the health of many species is lacking.

4. Migratory birds cross boundaries, ecosystems and nations. Protecting them must be a cooperative effort that involves multiple jurisdictions and interests.

5. Success will come from regionally based, biologically driven, landscape-oriented partnerships delivering the full spectrum of bird conservation across the entirety of the North American continent.

6. Migratory birds are an incredibly valuable resource, contributing economically, aesthetically, and socially to America's citizens. Millions of people "connect" with birds through bird watching and hunting.

In order to achieve our vision for migratory bird conservation, the Service will focus on four major goals:

1. Conserve bird populations and their habitats.
2. Implement conservation strategies to reduce overabundant populations.
3. Increase effectiveness through partnerships.
4. Raise public awareness.

To achieve these goals, this plan identifies a series of action items and opportunities involving cooperative efforts across Service program lines and with a wide variety of external partners. This is the essence of the Service's commitment to ecosystem approach. In addition, specific action items are identified which will help involve and empower the Service's ecosystem teams to make a major contribution to migratory bird conservation.

Action Plan

Goal 1: Conserve Bird Populations and Their Habitats.

In 1998 two courts ruled that Federal agencies were not subject to the prohibitions under the Migratory Bird Treaty Act (MBTA). An Executive Order would provide guidance to the "Federal Family" to improve bird conservation efforts. In addition, authority on the high seas is needed to conserve short-tailed albatross and other species of concern.

Action: President signs Executive Order regarding Migratory Bird Treaty Act by October 1999. (ARW/MBMO, AEA/PA)

Opportunity: Director, Secretary, and other agency heads attend signing of Executive Order.

Action: Develop an effective initiative for inreach and outreach and technical assistance that provides Federal agencies with guidance for successfully operating under the Migratory Bird Treaty Act Executive Order by January 2000. (ARW/MBMO)

Action: Develop national policy and legal basis for extending authority of the Migratory Bird Treaty Act to U.S. citizens and U.S. flagships on

the high seas by May 1999. (ARW/MBMO)

Opportunity: Director makes announcement with National Marine Fisheries Service at North American Wildlife and Resources Conference or at an annual meeting of a large NGO.

Action: Create Migratory Bird Treaty Act information and education materials by January 2000, that explain the Service's responsibilities and permits, as well as Service program operations under the Act. (ARW/MBMO, LE, AEA/PA)

Action: Participate with all other Service permit-issuing programs in a Permits Reform effort designed to enhance conservation cooperation with scientific community, foster use of permits as conservation tools, and better serve the regulated public. (ARW/MBMO, AIA/OMA, AES/TE, LE)

Opportunity: Directorate delivers public addresses on Service goal of making intentions of MBTA clear to the public and to specific migratory birds users and cooperators.

Action: By December 1999, establish management bodies, involving Native, Federal, and State of Alaska representatives, to facilitate subsistence management and conservation of migratory birds under the 1997 protocols to the 1918 and 1936 Migratory Bird Treaties. (RD 7).

Opportunity: Public event in Alaska at the first formal meeting of management bodies.

Action: Propose first annual subsistence hunting regulations for Alaska by April 2001. (RD 7, ARW/MBMO).

Action: Develop an effective strategy and regulations to permit the take of peregrine falcons upon the Services proposed delisting (August 1999). (ARW/MBMO, AES/TE).

Action: Work more closely with the bird community to develop rehabilitation guidelines that will accommodate the public need, handle birds in a humane manner, and maintain the conservation ethic that permits were established under. Produce subsequent guidance and a proposed rule on rehabilitation permits in the Federal Register by June 2000. (ARW/MBMO, RDs 1-7).

Action: Revise Migratory Bird Permits parts 21.1-14 (Introduction to General Requirements and Exceptions) and parts 21.24-25 (Taxidermist and Waterfowl sale and disposal), including updates, plain language and fact sheets, by May 2000. The revisions will clearly explain the permitting process and why it is important to the conservation of migratory birds, and will give nationwide consistency to the process. (ARW/MBMO, RDs 1-7).

Action: Convene a professionally facilitated meeting in October 1999, that brings together parties interested in the issue of migratory bird/telecommunications interactions. This meeting will begin a dialogue about minimizing the lethal effects telecommunications structures have on migratory birds. (ARW/MBMO, RDs 1-7, AES/HC)

Action: Restore the capabilities of the National Wildlife Forensic Lab by December 2000, to provide bird identification services for Law Enforcement and other Service programs. (LE, ARW/MBMO)

Opportunity: Director informs other agencies and partners of increased Service capability to assist in bird identification.

Action: Develop FY2001 budget initiative by July 1999, to provide greater staff support towards reducing unlawful take of migratory birds. (LE).

Opportunity: Directorate profiles Law Enforcement success stories to highlight the demonstrated need and the benefit of law enforcement actions towards the conservation of migratory birds.

Action: The National Wildlife Refuge System will develop a consistent monitoring and assessment protocol sufficient to maintain the integrity and diversity of migratory birds on refuges (ARW/RF, RDs 1-7).

Action: Use LWCF appropriations to acquire additional lands for habitats that constitute important migratory bird habitat. (ARW/RF, RE, RDs 1-7).

Opportunity: Complete Aldo Leopold NWR acquisition decision document by September 1999. RD-3 attend dedication ceremony, highlighting Leopold's "land ethic" and how the refuge benefits migratory birds.

Action: Develop and implement national guidance for Comprehensive Conservation Planning process on National Wildlife Refuges to incorporate information (e.g., the species of concern, suggested monitoring protocols) listed in national conservation plans (i.e., Partners in Flight, Colonial Waterbird Conservation Plan, Shorebird Plan) to the greatest extent possible. Guidance will be ready by October 1999, and implementation will occur as plans are finalized. (Development: ARW/RF; implementation: RDs 1-7 ensure plans have followed guidance).

Action: Provide technical expertise and oversight to CCP planning

teams to incorporate the latest available information on the status of and management opportunities for migratory birds such as Partners in Flight Plans. (RDs 1-7, Ecosystem Teams).

Opportunity: As an example, Stillwater National Wildlife Refuge will complete its CCP and incorporate shorebird information. The Regional Director (R1) can then preside over American Bird Conservancy designation of Stillwater NWR as an Important Bird Area for shorebirds.

Action: Designate appropriate refuges as Important Bird Areas, Western Hemisphere Shorebird Reserve sites, and Ramsar Wetlands of International Importance. Designate 10 additional refuges by July 2000. (ARW/RF, RDs 1-7).

Opportunity: AD — International Affairs and Regional Director (R6) attend Ramsar dedication ceremony at Sand Lake NWR, May, 1999, as part of International Migratory Bird Day. Also, Directorate is represented at dedication ceremonies at other sites.

Action: Work with other countries through the Trilateral Committee and non-governmental organizations to reduce impacts of pesticide use on migratory birds by recommending reduced-risk pesticides, education, and Integrated Pest Management techniques. (AES/EC, ARW/MBMO, AIA/OIA).

Action: Enhance capability of the Service's new International Conservation Corps (ICC) to provide effective and rapid technical guidance for international migratory bird management projects by September 2000. (AIA/OIA).

Opportunity: Directorate encourages Service personnel with the necessary technical expertise to

participate in ICC projects for migratory bird conservation.

Action: Increase support for coordinating and integrating the various migratory bird conservation initiatives relating to Latin America and the Caribbean. (AIA/OIA).

Action: Increase support by December 2000, for the Winged Ambassadors' migratory bird conservation initiative in Latin America and the Caribbean that focuses on sustaining important habitats and reversing habitat loss and degradation. (AIA/OIA).

Opportunity: During 1999, IMBD, highlight success of Winged Ambassadors at Caribbean embassy event that celebrates the initiative's achievements for migratory bird conservation.

Action: By the end of 2000, produce the technical protocol to implement fully adaptive harvest management, by accounting for all major mallard stocks and by allowing for flyway-specific selection of regulatory alternatives. (ARW/MBMO).

Opportunity: Director resurrects original AHM Task Force to maintain commitment to these objectives.

Action: Develop an international adaptive harvest management framework for black ducks through financial and technical support of the Black Duck Joint Venture by December 2000. (ARW/MBMO and NAWWO).

Action: By the end of 1999, execute an MOA with NASA's Earth Science Strategic Enterprise to explore the application of remote sensing and attendant technologies to the large-scale monitoring of migratory bird habitat. (ARW/MBMO, NAWWO).



Altamira Oriole, Santa Ana NWR. Photo by Karen Hollingsworth.

Opportunity: Director signs MOA with NASA Administrator.

Action: Develop monitoring and assessment infrastructure within Joint Ventures to support delivery and evaluation of NAWMP and other migratory bird initiatives, through innovative partnerships among MBMO, NAWWO, BRD Science Centers, Cooperative Fish and Wildlife Research Units, NRCS Wildlife Habitat Management Institute, Universities, Ducks Unlimited, NASA, and others. (RDs 1-7, ARW/NAWWO).

Opportunity: Showcase one or more Joint Ventures where monitoring and assessment programs are having a demonstrable impact on

habitat management activities (e.g., Prairie Pothole or Lower Mississippi Valley JV's).

Goal 2: Implement Conservation Strategies to Reduce Overabundant Populations

The mid-continent population of light geese (Ross and Snow) has tripled within the last thirty years to approximately 3 million birds. This large population is now damaging fragile tundra habitat that they and other species depend upon.

Action: Develop a strategy (through a steering committee which includes Ecosystem Team representation) to address long-term solutions, including communications, to

managing overabundant snow goose populations in North America by July, 2000. (ARW/MBMO, RDs 3, 4, 5, 6).

Action: Developed and implemented a conservation order by February, 1999, that will reduce the number of mid-continent light geese that have become seriously injurious to their arctic breeding habitat and habitat important to other migratory birds. (ARW/MBMO).

Action: Allocate \$200,000 within Service budget to leverage additional funds, through partnerships with states and NGOs, to establish and improve habitat and population evaluation and monitoring programs for assessment of snow goose management actions by January, 2000. (ARW/MBMO, RDs 3,4, 5, 6).

Action: Develop a regulation that provides for the implementation of a conservation or depredation order for resident Canada geese in the Atlantic, Mississippi, Central, and Pacific Flyways by January, 2001. (ARW/MBMO, RDs 1-6).

Action: Provide technical assistance (e.g., pamphlets) and sign agreements with States, municipalities, and other entities (e.g., U.S. Golf Association, National League of Cities) to reduce nuisance Canada goose populations. (RDs 1-7, ARW/MBMO, AEA/PA).

Action: In conjunction with U.S. Department of Agriculture, develop a strategic management plan for double-crested cormorants that reviews the significance of predation on sport and commercial fisheries and provides strategies for identifying and resolving conflicts. (ARW/MBMO, RDs 3,4,5, USDA).

Goal 3: Increase Effectiveness Through Partnerships

Private landowners control millions of acres of key habitat. The North American Bird Conservation Initiative (NABCI), launched in 1999, provides a forum to expand conservation of all birds in the hemisphere through regionally based, biologically driven partnerships. Expanded partnerships in the rest of the western hemisphere and in the North Pacific are also vital.

Action: Expand partnerships with private landowners, Land Trusts and other conservation partners to restore and protect important nesting and feeding habitat for migratory waterfowl and neotropical migratory birds. Target Director's wildlife restoration funds to restore coastal islands in the Gulf of Maine, native prairie communities in the Midwest and Great Plains, riparian habitats in arid ecosystems and along coastal streams, and longleaf pine communities in the Southeast. (AEA/FA, AES/HC, RDs 1-7, Ecosystem Teams).

Action: Develop and implement guidance that encourages field biologists in the Partners for Fish and Wildlife Program and Coastal Program to 1) focus on migratory birds when planning and implementing habitat restoration and protection projects, 2) reach out to new partners with specific interests in birds, and 3) enhance information exchange with partners and other Service programs regarding important migratory bird habitats. (AES/HC, RDs 1-7, Ecosystem Teams).

Action: Adopt new geographic units, "Bird Conservation Regions", developed under NABCI for ecologically based planning, implementation, and evaluation of cooperative bird conservation in the

U.S. by December, 1999. (ARW/MBMO and NAWWO).

Action: Support NABCI by providing major support (via staffing, funding, technical assistance, partnership development) in 1999 for implementation of two international transboundary migratory bird "joint ventures." One venture would be in the Mexico/US border region, such as the Sonoran Desert, and one in the Canada/US border region, such as the northern forest. (ARW, ARW/MBMO, ARW/NAWWO, and AIA/OIA).

Opportunity: Director announces (with partners) creation of a new "joint venture" and its importance to international bird conservation. Suggested venue: North American Wildlife and Natural Resources Conference.

Action: During the 106th Congress, work actively to support passage of the Neotropical Migratory Bird Conservation Act along with an appropriation for its implementation and, subsequently, initiate implementation of the hemisphere-wide migratory bird conservation program which it creates. (AIA/OIA, ARW/MBMO, AEA/LS).

Action: Open additional two "Centers of Excellence for Migratory Birds and Ecosystem Management", one in Costa Rica and one elsewhere in Latin America, by December, 2000, to train wildlife scientists and reserve managers in the principles of migratory bird conservation. (AIA/OIA).

Action: Identify joint projects under binational migratory bird treaties with Canada, Mexico, Russia and Japan by October, 1999, to promote conservation of migratory birds. (ARW/MBMO, RDs 1-7, AIA/OIA).

Opportunity: Directorate (WO and RO) participates in meetings with counterparts in Mexico, Russia and Japan to identify projects.

Action: Establish regional migratory bird and ecosystem conservation liaisons throughout Latin America and the Caribbean who would help link and coordinate international and domestic efforts to conserve migratory birds and facilitate the development of in-country programs. (AIA/OIA, ARW/MBMO).

Partnerships with other Federal agencies are essential to address major migratory bird issues such as: 1) indications that pesticides kill over 67 million birds annually, 2) loss of habitat, and 3) mortality caused by marine fisheries operations.

Action: Work with EPA's Fate and Effects Branch, Registration Branch and Branch of Endangered Species Protection to establish a process by December, 2000, for using FWS expertise in evaluating the effects of pesticides on migratory birds and other non-target organisms. (AES/EC).

Action: Develop MOU by December, 2000, with National Marine Fisheries Service to reduce avian bycatch through preventative measures and facilitate future participation with states and fisheries commissions. (ARW/MBMO).

Action: Work with the State Department through August, 2000, to seek increased funding for wetland habitat conservation under the Wetlands for the Future initiative of the Ramsar Wetlands Convention. (AIA/OIA and ARW/NAWWO).

Opportunity: Director, AIA, ARW and staff meet with State Department's Deputy Assistant Secretary for Environment and staff to discuss migratory bird and wetland strategies.

Action: Create teams (3 biologists per region) of technical advisors, by identifying new FY2000 FTEs and current staff, to assist FWS ecosystem teams, other federal agencies (e.g., DOD, BLM, BOR, DOT) and others to better assess impacts to migratory birds during project planning and better manage their land holdings and activities for migratory birds. (RDs 1-7).

Action: Support completion of the North American Colonial Waterbird Plan with new FY2000 FTEs. (ARW/MBMO).

Opportunity: Director emphasizes FWS commitment to Colonial Waterbird conservation at meeting of all Colonial Waterbird Plan participants in spring, 1999.

Opportunity: RDs and Director participate in activities surrounding the release of Colonial Waterbird Plan in late 2000.

Action: Support completion and implementation of the National Shorebird Conservation Plan with new FY2000 FTEs. (Completion: ARW/MBMO; implementation: RDs 1-7/Ecosystem Teams).

Opportunity: Director stresses strong FWS commitment to completion of shorebird plan at national Shorebird Plan meeting in September 1999.

Opportunity: RDs and Director participate in activities surrounding completion of the Shorebird Plan in late 1999.

Action: Create an urban "treaty" to be signed by five major cities near areas of special importance to migratory birds. Treaties will herald our migratory birds in each city and provide funds for schools and city councils to complete joint projects under FWS banner by December 2000. NCTC to develop a long distance learning program associated with the "treaty" efforts. (AEA/PA, ARW/MBMO, NCTC)

Opportunity: Director and RDs sign "treaties" in public ceremonies; sign first treaty, with Washington, D.C., on International Migratory Bird Day, 1999.

Action: Support and expand the Shorebird Sister School Program to the entire United States and to neighboring countries by 2001. (NCTC, RDs 1-7, ARW/MBMO, AIA/OIA).

Action: Contact the National Girl Scout and Boy Scout Council to develop a badge for migratory bird projects and host a Migratory Bird Day at the annual Council meeting. (NCTC, ARW/MBMO).

Goal 4: Raise Public Awareness.

Action: Develop outreach materials to explain, particularly to farmers and ranchers, the effects of pesticides on migratory birds and how one can select and apply pesticides wisely. (AES/EC and AEA/PA).

Action: Create outreach materials that highlight the activities of the Winged Ambassadors Latin American and Caribbean Program by September, 2000. (AIA/OIA and AEA).

Action: Publicize how the Borderlands Program with Mexico contributes to the conservation of migratory birds by September, 2000. (AIA/OIA, AEA/PA, RD-2).

Action: Develop and implement by December 2000, a forest management outreach strategy with the U.S. Forest Service that informs the public and professional resource managers about the value and necessity of actively managing some forests for the benefit of migratory birds. (ARW/MBMO and AEA/PA).

Action: As Partners in Flight Bird Conservation Plans are released and implemented throughout the country, highlight at least one exemplary plan from each region. (RDs 1-7).

Opportunity: RDs and Director participate in International Migratory Bird Day events and emphasize implementation of Bird Conservation Plans. Participation in International Migratory Bird Day continues to grow each year. It provides an excellent forum for getting bird conservation messages to thousands of people.

Action: Explore a Presidential proclamation and encourage States to sign gubernatorial proclamations and sponsor 1999 International Migratory Bird Day activities. (AEA/PA and ARW/MBMO).

Opportunity: Secretary sends a letter to all governors, highlighting the economic and ecological importance of birds and encouraging IMBD participation.

Action: By February, 2000 complete State of the Birds, a document that details the current status of landbirds in the U.S. and promotes Partners in Flight and other migratory bird initiatives. (ARW/MBMO).

Opportunity: Director to unveil the new publication at International Migratory Bird Day activities in May 2000.

Action: Develop a short video presentation imparting a general migratory bird conservation message that could be used by Service personnel throughout the country. (NCTC, ARW/MBMO, ARW/NAWWO).

Invasive Species

A Call to Arms

Vision

The ecological and economic impacts of invasive species are better understood and the Nation has mechanisms in place to prevent their introduction and spread.

Introduction

With new invasions of alien species and their associated ecological and economic impacts occurring at an accelerating rate, there remains little question that invasive alien species represent one of the most insidious and challenging resource problems facing Federal, State, and Tribal governments, and the private sector. Nonnative plants and animals in the United States now number at least 6,300, with new invasions occurring on a weekly basis. A growing global economy, new transportation routes, and quicker transit times have all led to a proliferation of invasive species.

The Service has a long history of addressing invasive alien species. From noxious weed issues on National Wildlife Refuges to controlling sea lamprey in the Great Lakes, the Service has led the nation for decades in combating invaders and their associated economic and ecological impacts. For example, the Service's Fisheries Program provides regional and national coordination for aquatic invasive species, plays a leadership role in implementing the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, and conducts sea lamprey control in the U.S. portion of the Great Lakes. National Wildlife Refuges deal with a host of invasive weed problems and have developed cutting edge control methods, including biocontrol and prescribed burns. Through its law enforcement program, the Service has the authority to enforce

injurious/invasive fish and wildlife laws involving interstate commerce for all 50 States. Other programs, such as Endangered Species, Habitat Conservation, the National Fish Hatchery System, and the Offices of Management and Scientific Authority all address the issue with a variety of on-the-ground actions and policy initiatives.

The Service is prepared to expand its leadership role and has issued a "call to arms" to identify additional actions, steps, and authorities needed to prevent the introduction and spread of invasive species and control or manage those already established. The Service has over 700 field offices, hatcheries, and refuges and a wealth of biological and policy expertise that can help stem the tide of unwanted species. The Service's 52 ecosystem teams are also critical to the effort as they provide cross programmatic coordination, communicate directly with local partners, and undertake prioritized on-the-ground projects.

Over the next two years, the Service will develop and implement an aggressive program to enhance the Service's capability and leadership role to respond effectively to present and future invasive species problems and issues, especially those that adversely impact the Nation's fish and wildlife resources.

The strategy is to pursue a variety of on-the-ground, policy, and outreach actions to address the invasive species issue. All Service offices and ecosystem teams will focus efforts via the following goal statements:

1. Enhance leadership.
2. Take direct action.
3. Raise awareness.

Action Plan

Goal 1: Enhance Leadership

Through legislative and policy action, along with partnerships with Federal, State, Tribal, and Private partners, the Service will provide National and International leadership as the invasive species issue continues to grow.

Action: Utilize the 9th Annual International Zebra Mussel and Aquatic Nuisance Species Conference and associated meeting of the Aquatic Nuisance Species Task Force as a forum to introduce the Service's invasive species strategy. (D, AF, AEA).

Action: Establish and include objectives, performance measures, and workload indicators related to the introduction and spread of invasive species in the Service's strategic plan (GPRA). (D, AF, ARW, AES, ALE, APB).

Action: Request the Secretary to appoint the Director to represent him as a co-chair of the Invasive Species Council, as established by Executive Order, including housing of the Executive Director of the Council and appropriate staff. (D).

Action: Establish a small working group chaired by the AD — Fisheries to review Service functions and responsibilities related to invasive species and recommend to the Director the most effective and efficient organizational structure. (D).

Action: Issue guidance to the Directorate instructing them where appropriate to integrate invasive species prevention and control efforts into all aspects of their operations, including the cross programmatic efforts of ecosystem teams. (D).

Action: Develop and issue guidance for the Partners for Fish and Wildlife Program to contribute to the identification, prevention, and control of invasive species impacts on native species and their habitats. (D, AES).

Action: Work with the pet industry and the American Zoo and Aquarium Association to encourage adoption of voluntary measures that will prevent introductions and spread of invasive species, and to build consensus for additional legislative and/or regulatory solutions if needed. (D, AF, AIA, LE, AES).

Action: Develop and issue a Service policy for appropriate use of non-native species and strains. (D, AES, AF, ARW).

Action: In addition to the Great Lakes Fisheries Convention with Canada, use bilateral agreements with Mexico, Canada, South Africa, Russia, and China to address common invasive species problem, through cooperative projects. (AIA, AF, ARW, AES).

Action: Through Clean Water Action Plan involvement and in cooperation and consultation with other government entities and stakeholders (AES, AF, ARW):

1. Develop a Unified Federal Policy to assist watershed management and planning efforts to address deleterious effects of invasive species on native species and their associated habitats, and
2. Establish compatible data standards, resources classifications, inventory methods and protocols for stakeholder use when completing watershed based assessments of invasive species.

Action: Conduct a review of Service invasive species legislative authorities and develop proposed

language to fill gaps, such as the need to deny import of known invasive species posing a threat and the permitting of biological agent invasive species control. (AEA, AES, AF, AIA, ALE, ARW).

Action: Establish a Service team to review and update regulations and procedures for implementing the Injurious Wildlife Provisions of the Lacey Act of 1990 (18 U.S.C. 42) and work with the Pet Industry Advisory Council and other interested parties to develop support for additional injurious wildlife listings. (ALE, AF, AIA).

Action: Develop and offer an invasive species course to train Service employees and others to assess invasive species impacts, develop control plans, and ensure communication with other agencies and the public. (NCTC).

Action: Beyond the FY2000 budget request, evaluate cross-program funding needs to enhance invasive species efforts. (AES, AEA, AF, AIA, ALE, APB, ARW).

Goal 2: Take Direct Action

The Service will identify specific invasive species threats and develop and take direct action to prevent introductions, control spread, and mitigate associated impacts.

Action: Provide an IPA to the Western Governors Association to work with State, Federal, and Tribal agencies, and industry to support the Association's invasive species initiative. (D, AF, ARW, RDs 1, 2, 6, 7).

Action: Encourage development of and provide implementation funding for State and Interstate Aquatic Nuisance Species Management Plans. (AF, RDs).

Action: Encourage and facilitate Regional coordination of Aquatic Nuisance Species efforts by way of establishment of a Gulf of Mexico Regional Panel, and a Northeast Regional Panel. (AF, RDs 2, 4, 5).

Action: Using the successful South Dakota Integrated Pest Management activity conducted by Region 6, as an example, each Region will establish at least one demonstration area for these practices on Service lands. (ARW, AF, RDs).

Action: Initiate a comprehensive survey of harmful invasive species populations and their impacts on Service lands: (AES, AF, ARW, RDs). The Service should conduct an initial survey using available information, develop Refuge and National Fish Hatchery guidance for conducting and completing the survey, enlist citizen volunteers in completing surveys, and centralize Service survey data in the USGS Florida Caribbean Science Center in Gainesville, Florida.

Action: Begin implementing a pilot program required by P.L. 105-322 to develop measures to eradicate or control nutria and restore marshlands damaged by nutria. (ARW).

Action: Select 10 National Wildlife Refuges and two National Fish Hatcheries impacted by invasive species and implement appropriate control and mitigation activities. (AF, ARW, RDs).

Goal 3: Raise Awareness

The Service will elevate the discussion of invasive species and their impacts to all audiences, ranging from children's programs to international forums.

Action: Initiate discussion with key members of the International Association of Fish and Wildlife Agencies (IAFWA) to develop shared efforts. Use IAFWA Annual Meeting to encourage members to become more engaged with invasive species issues (i.e., uniform injurious species lists). (D, AES, AIA, AEA, AF, ARW, RDs).

Action: Publish a report of invasive species in "hot spots" of aquatic and terrestrial biodiversity accompanied by specific recommended actions to protect "at risk" native species communities. (D, AIA, AES, AEA, AF, ARW, RDs).

Action: Encourage and facilitate the development of an Invasive Species initiative for Oceania under South Pacific Regional Environmental Program auspices. (AF, ARW, AIA).

Action: Use CITES to address international aspect of movement of species (AIA, AF):

1. Engage the CITES Animals Committee to raise consciousness within the international community.
2. In consultation with stakeholders, investigate opportunities to address invasive species through CITES and develop proposals and discussion papers for the next CITES meeting in April 2000.

Action: Federal Aid will hold a series of workshops with States and other partners to identify and address opportunities to prevent the introduction, spread, and control of invasive species by way of Federal Aid funded projects. (AEA).

Action: Prepare generic invasive species information packets for use with the press and others, including (AEA, AIA, NCTC, AF, ARW, AES, RDs): invasive species issue brochure, biologies on high profile species, photos (slide and graphics files) and video B-roll, "America's Least Wanted" poster, and fact sheet on Service efforts and contacts.

Action: Washington and Regional External Affairs offices will properly publicize activities undertaken as part of this initiative. (AEA, RDs).

Action: Post Invasive species information and links on the Service's home page. (AA, AES, AEA, AF, AIA, NCTC, RDs).

Action: Prepare traveling displays for each Region on invasive species "Wildlife on the Move" for use at zoos, aquaria, airports, and other appropriate forums. (AEA, RDs).

Ecosystem Approach

Vision

Unite all Service programs to lead or support ecosystem level conservation through a more technically capable and culturally diverse organization. The Service will accomplish this by involving stakeholders through local action, applying scientific expertise, managing land and water, and applying appropriate regulations. (Fish and Wildlife Directorate, 1998).

Introduction

"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."
— Aldo Leopold

In 1994, the Service adopted the "Ecosystem Approach to Fish and Wildlife Conservation," answering Aldo Leopold's call to treat the landscape as a community, a whole much greater than the sum of the

parts. The Ecosystem Approach achieves landscape-level conservation of fish, wildlife, plants, and their habitats through cross program coordination within the Service and partnership with organizations and individuals external to the Service.

The Service established 53 Ecosystem Units based on U.S. Geological Survey watersheds. The Directorate envisioned ecosystem teams as the forum for communication and cooperation among refuges, hatcheries, fisheries, and Ecological Services field stations as well as other components of the Service.

At the Service's request, the Ohio State University completed an assessment of the Service's ecosystem approach in March 1998. The study identified management and organizational improvements that would support the ecosystem approach. The OSU assessment team presented the Service Directorate with 12 recommendations to increase



Partners/multi-agencies, NCTC, WV. Photo by Ryan Hagerty.

consistency, improve internal operations, and strengthen program advocacy. The Directorate's response to the report resulted in several changes. An important change is in place in the Regional Offices where a group of Geographic Assistant Regional Directors, Program Assistant Regional Directors, and Program Supervisors are working to ensure that Service resources are applied to problems in the most effective and efficient manner.

As part of a continuing commitment to meet resource needs and employee concerns during this transition, the Directorate established a national Ecosystem Approach Implementation Team to identify barriers and make recommendations to implement the Service's ecosystem approach. The team consists of members with diverse backgrounds from all programs and geographic regions of the Service. They have provided a variety of recommendations on belt-tightening measures, and guidance to teams on roles and responsibilities, communication, and training needs among others. The team is working on additional recommendations on partnerships, awards, and other significant issues of concern.

Ensuring that the Ecosystem Approach continues to develop and take root in the daily culture of the Service is very important to this agency. This Ecosystem Approach initiative was developed to strengthen the support to the ecosystem teams, and identify team priorities and successful models of cooperation that can be shared with other ecosystem teams. To strengthen the ecosystem approach in the next two years, all Service programs must become more involved in the ecosystem team's activities. To achieve this goal, all employees at every level of the organization must be more knowledgeable of the Ecosystem

Approach and understand that it is a better way of doing business. This includes those individuals responsible for contracting, personnel, equal opportunity, and other support functions and occupations who may be indirectly supporting ecosystem teams.

Although this initiative includes many new action items, many were developed from other sources — the Implementation Team recommendations to the Directorate, Washington Office Involvement in the Ecosystem Approach team report, the Ohio State University Report, and the Directorate's Response to that report. In some cases, the actions already have been implemented, but they are included here for the sake of completeness.

The action items focus on (1) leadership and accountability, (2) communications and coordination, (3) ecosystem teams support and partnering, (4) structure and budgets and (5) consistent policy, definitions, and planning. Completion of these items will help the Service meet the mounting conservation challenges that are ahead in the 21st century.

To accomplish these actions, the Service needs to:

1. Exhibit strong leadership and accountability.
2. Improve communication and coordination.
3. Provide the Ecosystem Teams adequate support and increase partnerships.
4. Determine obstacles to implementation related to the structure and budget.
5. Develop consistent Service policy, definitions, and planning processes.

All action items outlined in this initiative are substantial, requiring the agency to focus on several at one time. However, leadership, accountability and communications will receive priority attention as they show the Service's commitment to the ecosystem approach, and ensure ecosystem teams have the support and resources needed to address the migratory birds, refuges, and invasive species priorities outlined in other sections.

Action Plan

Goal 1: Exhibit strong leadership and accountability.

I. Leadership and Accountability

There is a need actively and openly to guide full adoption of the ecosystem approach into all aspects of Service operations with accompanying performance reviews.

Action: By October 1, 1999, draft suggested language to be included as a critical result in employees, managers, and Senior Executive Service's performance standards on the importance of supporting the ecosystem approach and ecosystem team activities. This involves requiring that support for the ecosystem approach be incorporated in the day-to-day activities of all Service employees, including administrative and support staff. (AD-PB).

Action: By July 1, 1999, incorporate the accomplishments of the ecosystem approach into evaluation criteria for recommendations and approvals of performance awards and bonuses for SES employees. (Directorate).

Action: Ensure that all individuals named as Program Supervisors have the appropriate experience. (AD-PB with Program Assistant Directors).

Action: By November 1, 1999, develop a mechanism to foster communication among the GARDs on a national level providing opportunities to exchange ideas on implementing the ecosystem approach. (Special Assistant to Deputy Director, GARDs).

Action: By January 1, 2000, ensure that all ecosystem teams have taken NCTC's team effectiveness survey. Follow up with additional training for teams, as appropriate. (Regional Directors, GARDs, NCTC).

Action: By June 1, 1999, provide the Director with specific action items that implement the roles and responsibilities of the Washington Office staff in the Ecosystem Approach. (ADs, Chief-Law Enforcement, and OHR).

Action: Periodically, dedicate DDD's staff meetings to discussions of the Washington Office staff involvement in ecosystem approach. (AEA).

Action: By May 30, 1999, nominate one ecosystem team per Region to make a presentation on team activities for the Director, Assistant Directors, and appropriate staff in the Washington office. (Regional Directors).

Action: By June 1, 1999, provide the Director with mechanisms to reward teams as well as individual and cross programmatic efforts implementing the ecosystem approach. (Deputy Director, Implementation Team, AD-PB).

Action: By July 1, 1999, include career advancement elements related to the ecosystem approach in the Leadership Development Guidance document. (Deputy ADs and RDs).

Goal 2: Improve communications and coordination.

Better communications are necessary to ensure that Service employees at all levels in the agency are knowledgeable about the Ecosystem Approach and to build understanding of and support for the Ecosystem Approach between Service employees and important external audiences. Internally, the Service Directorate must communicate directly and consistently with employees regarding the ecosystem approach and how activities are undertaken and achievements reported. Externally, the Service Directorate must communicate directly and consistently with audiences, including Members of Congress and their staffs, State and local elected officials, State fish and wildlife agencies, conservation and constituent groups, and the news media.

Action: By May 15, 1999, establish a regular "Ecosystem Approach" page in *Fish and Wildlife News* to highlight ecosystem approach activities and accomplishments. (Deputy Director, Implementation Team, AEA).

Action: By May 30, 1999, identify an outreach contact for each ecosystem team. (Regional Director, GARDs, Ecosystem Teams).

Action: By October 1, 1999, use the Service's national outreach plan to develop a communication outreach plan and supporting materials regarding the ecosystem approach for use by the Service Directorate. (AEA).

Action: By October 1, 1999, update and improve ecosystem approach web pages and provide for their continuing maintenance. (AD-AA, AD-AEA, Special Assistant to the Deputy Director).

Action: By May 1, 2000, ensure that outreach support is available to each team to develop and promote information for internal publications and news media. (Regional Directors).

Action: By July 1, 2000, visit at least one ecosystem team meeting. (Directorate).

Action: Beginning May 30, 1999, brief members of Congress and staff as well as other external audiences on the ecosystem approach and successes of the ecosystem teams' on-the-ground activities. (Director, Deputy Director, AD-AEA, AD-PB, RDs, and Ecosystem Teams).

Action: Beginning March 1, 1999, extend invitations to external audiences to visit ecosystem team projects. (Regional Directors, Ecosystem Team Leaders).

Action: Beginning May 30, 1999, on a quarterly basis, provide a list of team meetings or events that offer opportunities for participation by the members of the Service Directorate. (Ecosystem Team Leaders, Regional Directors).

Action: By October 1, 1999, provide the Director with highlights of several successful ecosystem team projects. (Assistant Directors, RDs).

Action: By January 1 of each year, consolidate these highlights into a single Service publication. This "Ecosystem Highlights document" will be used with internal and external audiences to explain and illustrate the Ecosystem Approach. (Regional Directors, AD-AEA).

Goal 3: Provide the ecosystem teams adequate support and increase partnerships.

Ecosystem team roles and responsibilities should be clearly

defined and stakeholders and interested partners fully involved.

Action: By May 30, 1999, reissue the memorandum outlining the roles and responsibilities of the Geographic Assistant Regional Directors, and Program Assistant Regional Directors as a Director's Order. (AD-PB).

Action: By August 1, 1999, complete the Ecosystem Teams Roles and Responsibilities guidance document. GARDs will familiarize themselves with this document and utilize it and other guidance to ensure productive team activity. (Deputy Director, Implementation Team, GARDs).

By October 1, 1999, develop a mechanism (i.e., team leaders' meetings) to communicate successful team approaches to other regional managers. (GARDs).

Action: By May 30, 1999, convene a team to develop a strategy/guidance on successful partnerships with stakeholders. Provide appropriate recommendations as they are developed. Complete the draft outline by June 1, 1999, and a final by April, 2000. (Director, AD-AEA).

Goal 4: Determine obstacles to implementation related to structure and budget.

A budgetary framework should be provided for full implementation of the Ecosystem Approach to fish and wildlife conservation.

Action: By June 1, 1999, schedule meetings with Congressional staff and determine institutional barriers to translate ecosystem priorities into Service budget submissions to Congress. Make recommendations for change. (AD-PB, AEA).

Action: By April 1, 1999, issue written Regional memorandum in consultation with the ecosystem teams clarifying how ecosystem teams in each Region will be involved in the Regional budget development process. (Regional Directors).

Action: Each year identify national budget thrusts at the spring Directorate budget meeting. (Directorate).

Action: By September 1, 1999, issue guidance that recognizes ecosystem team priorities in Regional budget allocations. Encourage appropriate flexibility in these allocations. (ADs, AD-PB, RDs).

Action: By September 1, 1999, review and appropriately revise all program budget allocations, criteria, and work activity guidances to the Regions to ensure that they incorporate the implementation of the ecosystem approach in all Service activities. (All Assistant Directors).

Action: Continue the belt-tightening measures outlined by the Director to reduce impact on field budgets until the end of FY 99. These measures include Washington Office support for salaries of Washington Office staff who transfer to GARD, PARD, and Program Supervisor positions; 10 percent travel reduction for Regional and Washington Offices; and abolishing or delaying backfilling of certain vacant positions. (Directorate).

Action: Continue to provide employees the adequate justification for any significant budget reductions in field. (Regional Directors).

Goal 5: Develop consistent Service policy, definitions, and planning processes.

Action is needed to develop policy and fully and consistently describe and define the ecosystem and accompanying roles and responsibilities for implementation.

Action: By May 30, 1999, issue a Director's Order requiring that all revised/updated guidance and policy documents incorporate the importance of the ecosystem approach to fish and wildlife conservation in day-to-day activities. (DD, AD-PB).

Action: By October 1, 2000, revise the chapter in the Service manual on the Ecosystem Approach and make it widely available. (AD-PB).

Action: By October 1, 2000, include elements of the Ecosystem Approach in all appropriate NCTC courses to ensure that employees have a common technical and policy understanding. (Director-NCTC).

The action items are all substantial with many to focus on at one time. Service managers must exhibit strong support, and it is imperative that employees and external partners are aware of team activities and accomplishments. Therefore, leadership and accountability and communications will receive priority attention as they will show the Service's commitment to the Ecosystem Approach and ensure ecosystem teams have the support resources they need to address other Service priorities.

Appendix: Abbreviations

AEA: Assistant Director, External Affairs	MOA: Memorandum of Agreement
AES: Assistant Director, Ecological Services	MOU: Memorandum of Understanding
AHM: Adaptive Harvest Management	NABCI: North American Bird Conservation Initiative
AIA: Assistant Director, International Affairs	NAWMP: North American Waterfowl Management Plan
ARW: Assistant Director, Refuges and Wildlife	NAWWO: North American Waterfowl and Wetlands Office
BLM: Bureau of Land Management	NASA: National Aeronautics and Space Administration
BRD: Biological Resources Division (USGS)	NCTC: National Conservation Training Center
BOR: Bureau of Reclamation	NGO: Non-Governmental Organization
DOD: Department of Defense	NRCS: Natural Resource Conservation Service (USDA)
DOT: Department of Transportation	NWRS: National Wildlife Refuge System
EC: Environmental Contaminants	OIA: Office of International Affairs
FA: Federal Aid	PA: Public Affairs
HC: Habitat Conservation	PIF: Partners in Flight
IA: International Affairs	RE: Division of Realty
ICC: International Conservation Corps	RD: Regional Director
IMBD: International Migratory Bird Day	RF: Division of Refuges
JV: Joint Venture	TE: Division of Endangered Species
LE: Law Enforcement	USDA: United States Department of Agriculture
LS: Legislative Services	USGS: United States Geological Survey
LWCF: Land and Water Conservation Fund	
MBMO: Office of Migratory Bird Management	

END

02-07-00